

REMARKS

In reply to the Office Action of May 22, 2008, Applicant submits the following remarks. Claims 1 and 24 have been amended. Support for the amendment to the claims can be found at least in the specification as filed at page 3, in the last paragraph, page 5, in the last paragraph and page 6, in the last paragraph, which continues on page 7. These passages correspond to paragraphs 16, 21 and 26 of U.S. Publication No. 20050069727. Applicant respectfully requests reconsideration in view of the foregoing amendments and these remarks.

All of the pending claims have been rejected under 35 U.S.C. 102(e) as allegedly being anticipated by U.S. Publication Number 2005/0064234 ("So"). The applicant respectfully disagrees in light of the amendments to the independent claims.

Amended claim 1 is directed to an emissive polymer that requires host components mixed with at least one of electron traps or hole traps. Upon introduction of holes and electrons into the emissive polymer layer, emission of light occurs primarily due to recombination at the host components. Amended claim 24 is directed to an organic light emitting diode device with an emissive polymer layer that includes host components that are mixed with at least one of electron traps or hole traps. Upon introduction of holes and electrons into the emissive polymer layer, emission of light occurs primarily due to recombination at the host components.

So describes polymer chains 110 (FIG. 1, paragraph 12). Multiple monomers of two different types (i.e., monomers A and monomers B) are coupled (e.g., chemically coupled) together to form a portion of a polymer chain 110. In some embodiments, monomers A are responsible for electron injection and transport and monomers B are responsible for hole injection and transport (paragraphs 13 and 14). In this embodiment, only end groups C emit visible light (paragraph 15). The end groups C are fluorescent centers, phosphorescent centers or charge traps. If the end groups C are traps, then the end groups C capture electrons and/or holes. An emissive OLED device has an emissive layer 214 comprised of multiple polymer chains (paragraph 34). Each of the polymer chains includes a portion of the polymer chain comprised of monomers A and monomers B, and an end group C coupled to ends of the portion of the polymer chain. The end groups C emit light.

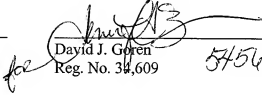
So does not describe host components mixed with traps, wherein upon introduction of holes and electrons into the emissive polymer layer, emission of light occurs primarily due to recombination at the host components. Rather, So describes monomers C that emit light and function as charge traps. Even if other monomers in the chain were able to emit light, rather than merely inject or transport electrons or holes, the other monomers are not mixed with light emitting monomers. Rather, multiple monomers A, B and C are coupled together to form polymer chains. For at least this reason, applicant submits that claims 1 and 24 as amended are not anticipated by So. The claims that depend therefrom are similarly not anticipated.

Further, claim 2 requires that the layer includes the electron traps and the layer has a first energy barrier to trap electrons between a LUMO level of said host components and a LUMO level of the electron traps. Claim 3 requires that the layer includes the hole traps, the layer has a third energy barrier to trap holes between a HOMO level of said host components and a HOMO level of said hole traps. Claim 29 requires that the HOMO level of the host components is less than the HOMO level of the electron/hole traps and the LUMO level of the electron/hole traps is less than the LUMO level of said host components. Claim 30 requires that the HOMO level of the electron traps is greater than the said HOMO level of the host components. Claim 31 requires that the LUMO level of the host components is greater than the LUMO level of the hole traps. These dependent claims require that the host components are different from the traps because of their different HOMO or LUMO levels. So does not describe a mixture of trap and host components at which emission of light occurs, but rather only describes co-polymers where groups C emit light and are fluorescent centers, phosphorescent centers or charge traps. That is, in So, the light emission and trapping appears to occur at monomer C. For this further reason, applicant submits that claims 2, 3 and 29-31 are not anticipated by So.

Applicant respectfully requests withdrawal of the rejections.

The three-month extension of time fee in the amount of \$1,110 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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David J. Goren
Reg. No. 34,609 57563

Customer No. 26181
Fish & Richardson P.C.
Telephone: (650) 839-5070
Facsimile: (877) 769-7945